

# SCANNING

A presentation for The FortMac Users Group  
<http://fortmac.org/>



**FORT MAC USER GROUP**

FORT COLLINS, CO

Some items from the web site  
<http://www.scantips.com/>

Also a very handy scanning reference.

There are over 900 pages of information about scanning.

As the author, **Wayne Fulton** says;  
The purpose is to offer some scanning tips and to explain the basics for photos and documents. It is about the fundamentals of digital images, about the basics to help you get the most from your scanner. **How it works, for those that want to know.**

## POINTS TO BE COVERED HERE.

- \* Scanning for “Paperless” office/home.
  - \* Quality of original
  - \* Just copying for archiving
  - \* Stitching/Merging scans
  - \* Readable
  - \* OCR Accuracy
  - \* Searchable text, PDF

## Never used a scanner before?

### Types of scanners

- \* Flatbed
  - \* All-In-One printer
  - \* Dedicated
- \* Sheet feeder
  - \* Single sheet
  - \* Multiple sheets
  - \* Double sided sheets
- \* Portable, Hand scanner
- \* Business card reader
  - \* Scanner
  - \* Photo
- \* Slide scanner
- \* Negative scanner
- \* Camera, iPhone and iPad

## FLATBED SCANNER

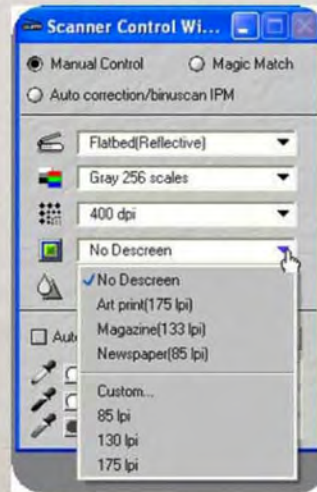
The flatbed scanner is very much like a copy machine, to the extent that it has a glass plate under a lid, and a moving light that scans across under it. Except that scanners can do great color too, and have more controls possible. And like a copy machine, a flatbed scanner allows you to scan photos, paper documents, books, magazines, large maps, or even 3-dimensional objects (those that don't have a lot of depth, coins for example), etc. It scans very much like a copy machine. But instead of creating another piece of paper like a copy machine does, we instead create an image in memory, which we can do with as we please. We have acquired a digital image, and we can show it on the screen, or write a file and email it, or print it, anything we wish.

**Is the quality of the original worth  
scanning?**

**Do you really want this one?**



# DESCREEN?



# DESCREEN

- If scanning an image from a magazine, newspaper or some other form of print you may need to apply a Descreen, which allow you to remove the moiré pattern. (A moiré is an undesirable pattern in printing that results from incorrect screen angles of overprinting halftones.)
- Select the appropriate Descreen from the dropdown menu located next to the icon.
- Note: Descreen should not be used when scanning photos.

# DESCREEN

- Descreening is a way to optimize your scan by altering the LPI (Lines Per Inch) at which you scan. There are 3 main descreening settings. These are only guidelines, use your scanning software to tweak these settings. Experiment, have fun, make your own rules.
- Here are the settings:
- Magazines - should be scanned at 133 lines per inch. This smoothes the dot pattern found in glossy magazines.
- Newspaper photos - should be scanned at 85 lines per inch, This smoothes the coarse grain pattern commonly found in newspaper images.
- Art prints - are scanned at 175 lines per inch. This smoothes the fine dot pattern found in high quality art prints.

# DESCREEN

- ☼ How do you descreen a photo that is being scanned from a yearbook? Do you need a special program?
- ☼ Simple, go to your Filter menu Look for Blurs, find Gaussian Blur. Using a Radius of 1 to 1.5 pixels you should be able to descreen your image appropriately.
- ☼ Then under the Filters menu look for Sharpen. Sharpen once and if you feel a slight more sharpening is needed then use Sharpen More...

# DESCREEN

Without



With



**We can clean, repair and modify scans.**

600 DPI, 32.5MB, 16.7 million colors



**We can clean, repair and modify scans.**

600DPI, 1.3MB, 4 grays

Note: tear repaired using GraphicConverter



## You can stitch pieces together to make a copy of a large page.

### IMPORTANT! Save This Information

A soft copy (PDF) of the User Manual is available found pre-loaded on certain products or on a tech support site at <http://support.wdc.com>. Should you encounter any problem, please give us an opportunity to address it before returning this product. Most technical support questions can be answered through our knowledge base or e-mail support service at <http://support.wdc.com>. If the answer is not available, or if you prefer, please contact WD at the best telephone number shown above. Your product includes 30 days of free telephone support during the warranty period. This 30-day period starts on the date of your first telephone contact with WD technical support. E-mail support is free for the entire warranty period and our extensive knowledge base is available 24/7. To help us keep you informed of new features and services, remember to register your product online at <http://register.wdc.com>.

is

available on our website at <http://products.wdc.com/updates>, and may also be found pre-loaded on certain products or on the product CD (if supplied). A printed copy may be requested through our tech support site at <http://support.wdc.com>. Should you encounter any problem, please give us an opportunity to address it before returning this product. Most technical support questions can be answered through our knowledge base or e-mail support service at <http://support.wdc.com>. If the answer is not available, or if you prefer, please contact WD at the best telephone number shown above. Your product includes 30 days of free telephone support during the warranty period. This 30-day period starts on the date of your first telephone contact with WD technical support. E-mail support is free for the entire warranty period and our extensive knowledge base is available 24/7. To help us keep you informed of new features and services, remember to register your product online at <http://register.wdc.com>.

[tp://products.wdc.com/updates](http://products.wdc.com/updates), and may also be found pre-loaded on certain products or on the product CD (if supplied). A printed copy may be requested through our tech support site at <http://support.wdc.com>. Should you encounter any problem, please give us an opportunity to address it before returning this product. Most technical support questions can be answered through our knowledge base or e-mail support service at <http://support.wdc.com>. If the answer is not available, or if you prefer, please contact WD at the best telephone number shown above. Your product includes 30 days of free telephone support during the warranty period. This 30-day period starts on the date of your first telephone contact with WD technical support. E-mail support is free for the entire warranty period and our extensive knowledge base is available 24/7. To help us keep you informed of new features and services, remember to register your product online at <http://register.wdc.com>.

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This was done with the Photomerge Panorama command in Photoshop Elements.

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# You can make tiny print legible.



## Technical Support and Limited War

| North America       |                                     | Asia Pacific |  |
|---------------------|-------------------------------------|--------------|--|
| English             | 800.ASK.4WDC<br>(800.275.4932)      | Australia    |  |
| Spanish             | 800.832.4778                        | China        |  |
|                     |                                     | Hong Kong    |  |
|                     |                                     | India        |  |
| Europe (toll free)* | 00800 ASK4 WDEU<br>(00800 27549338) | Indonesia    |  |
|                     |                                     | Japan        |  |
| Europe              | +31 880062100                       | Korea        |  |
| Middle East         | +31 880062100                       | Malaysia     |  |
| Africa              | +31 880062100                       | Philippines  |  |
|                     |                                     | Singapore    |  |
|                     |                                     | Taiwan       |  |

\* Toll free number available in the following countries: Austria, Belgium, Denmark, France, Switzerland, United Kingdom.

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Your product includes 30 days of free telephone support durin date of your first telephone contact with WD technical support our extensive knowledge base is available 24/7. To help us ke to register your product online at <http://register.wdc.com>.

## Optical Character Recognition (OCR)

- Most scanner software will do OCR.
- Output is relative to the quality of the scan.
- If the picture is jagged the OCR may not be very good.
- Handwritting is very unreliable.
- Small print needs more dots per inch(DPI) to get reliable character recognition.

Scans at different resolutions.

150 DPI

**Morningside**

Scans at different resolutions.

300 DPI

**Morningside**

Scans at different resolutions.

1200 DPI

**Morningside**

Fuzzy is not good either.

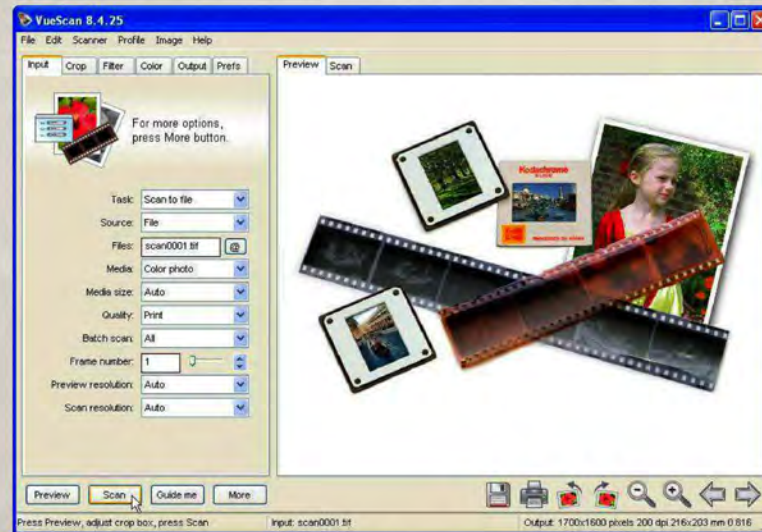
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IMPORTANT! S8Wlblslnf\_  
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and may  
be found on the product or the  
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## CONVERT SCANS TO PDF

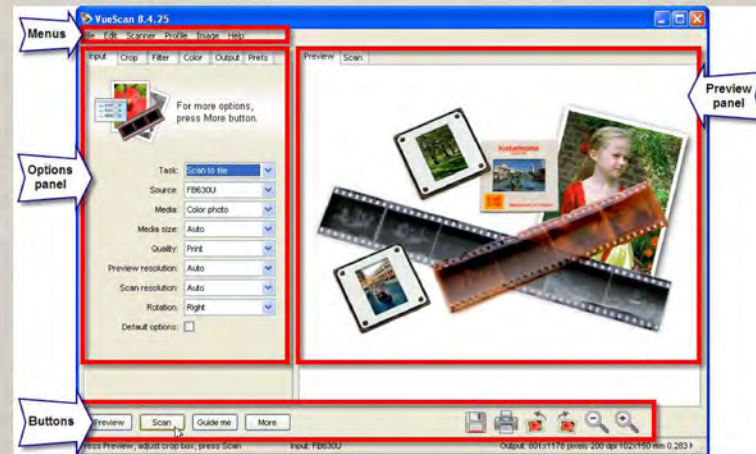
- Produces searchable text.
- PDFs are transportable.
- Takes much less space.
  - For example:
    - A 2400 DPI page takes 470MB.
    - A PDF of it only takes 61KB.
    - That's less than 0.02%.

# VUESCAN



# VUESCAN

<http://hamrick.com/>



# VUESCAN

<http://hamrick.com/>

- Common tasks
  - Scanning many photographs in a batch
  - Scanning to a multi-page PDF file
  - Turn VueScan into a 'photocopier'
  - Saving files
  - Choosing different resolutions

# VUESCAN

<http://hamrick.com/>

VueScan is one of the world's most widely used software interfaces for digitizing film and prints on flatbed and film scanners. This powerful yet affordable program supports over 1,600 scanners and more than 300 digital camera RAW and scan RAW file types. It is the only scanning program that supports Mac OS X, Windows, and Linux.

\$39.95/Year or \$79.95 unlimited

**VUESCAN**

**<http://hamrick.com/>**

SASCHA STEINHOFF

**The VueScan Bible**

Everything You Need to Know for Perfect  
Scanning

176 page book, \$20 to \$40.

## Readiris 12

<http://www.irislink.com>

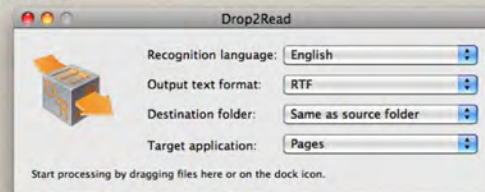
Readiris 12 is a text recognition software that performs all your tedious retyping work in no time. Simply scan any document with your scanner, recognize it with Readiris 12 and within seconds you have a fully editable copy of your paper document in your favourite word processor, spreadsheet application or in one of the many available output application. Readiris 12 works with scanned paper documents, PDF files and image files.

## Readiris 12

<http://www.irislink.com>

I like it because I can select areas to OCR and ignore others like graphics.

Comes with a Drop-On utility (Drop2Read) which allows quick scanning of simple documents.



Readiris<sup>12</sup>

<http://www.irislink.com>

\$129 or less, free or discounted with some scanners.

<http://www.irislink.com/c2-1584-189/Readiris-12>